

23. (new) A handheld control device for interfacing with a host processor, said control device comprising

a moveable user object engageable by a finger of the user and movable in at least one degree of freedom with respect to said housing;

an actuator operative to provide tactile feedback to said user of said handheld control device;

a wireless communication interface operative to transfer data from the control device to the host processor and from the host processor to the control device.

25. (new) A handheld control device as recited in claim 24 wherein said roller can be pressed by said user to trigger an electrical signal output to said host processor.

27. (new) A handheld control device as recited in claim 26 wherein said two degrees of freedom include a rotary degree of freedom and a translatory degree of freedom.

29. (new) A handheld control device as recited in claim 23 further comprising a microphone for receiving voice commands from said user.

31. (new) A handheld control device as recited in claim 23 wherein said host processor is included in a personal computer.

32. (new) A handheld control device as recited in claim 23 wherein said host processor is included in a Web-access device.

33. (new) A handheld control device as recited in claim 23 wherein said host processor is included in a consumer electronic device.

34. (new) A handheld control device as recited in claim 23 further comprising a local processor, separate from said host processor and operative to communicate with said host processor, to read said sensor, to control said actuator to produce tactile sensations, and to control said local display screen.

35. (new) A handheld control device for interfacing with a host processor running a graphical application, said control device comprising:

a housing shaped to be held by a user;

a moveable user object engageable by a finger of the user and and movable in at least one degree of freedom with respect to said housing;

a sensor operative to detect the motion of said moveable user object in said degree of freedom;

an actuator operative to provide tactile feedback to said user of said handheld control device, said tactile feedback being coordinated with graphical images displayed by said host processor;

a local display screen mounted on said housing and separate from said host processor, said display screen operative to display information related to a program running on the host processor; and

a wireless communication interface operative to transfer data from the control device to the host processor and from the host processor to the control device.

36. (new) A handheld control device as recited in claim 35 wherein said user object is a roller.

37. (new) A handheld control device as recited in claim 36 wherein said roller can be pressed by said user to trigger an electrical signal output to said host processor.

38. (new) A handheld control device as recited in claim 36 wherein said roller is moveable in two degrees of freedom.

39. (new) A handheld control device as recited in claim 38 wherein said two degrees of freedom include a rotary degree of freedom and a translatory degree of freedom.

40. (new) A handheld control device as recited in claim 35 wherein said local display screen has a touch-sensitive surface.

41. (new) A handheld control device as recited in claim 35 further including a microphone for receiving voice commands from said user.

42. (new) A handheld control device as recited in claim 35 wherein said host processor is included in a video game console.

43. (new) A handheld control device as recited in claim 35 wherein said host processor is included in a personal computer.

44. (new) A handheld control device as recited in claim 35 wherein said host processor is included in a Web-access device.

45. (new) A handheld control device as recited in claim 35 further comprising a local processor separate from said host processor and operative to communicate with said host processor, to read said sensor, to control said actuator to produce tactile sensations, and to control said local display screen.

46. (new) A handheld control device for interfacing with a host processor running a graphical application and for controlling a cursor displayed within said graphical application, said control device comprising:

a housing shaped to be held by a user;

a moveable user object engageable by a finger of the user and moveable in at least two degrees of freedom with respect to said housing;

a sensor operative to detect the motion of said user object in said two degrees of freedom;

an actuator operative to provide tactile sensations to said user of said handheld control device, said tactile sensations coordinated with cursor interactions with graphical objects displayed by said host processor;

a local display screen mounted on said housing and separate from said host processor, said display screen operative to display textual information related to a program running on the host processor; and

a communication interface operative to transfer data from the control device to the host processor and from the host processor to the control device.

47. (new) A handheld control device as recited in claim 46 wherein said user object is a roller.

48. (new) A handheld control device as recited in claim 47 wherein said roller can be pressed by said user to trigger an electrical signal output to said host processor.

49. (new) A handheld control device as recited in claim 49 wherein said two degrees of freedom include a rotary degree of freedom and a translatory degree of freedom.

50. (new) A handheld control device as recited in claim 46 wherein said local display screen has a touch-sensitive surface.

51. (new) A handheld control device as recited in claim 46 further comprising a microphone for receiving voice commands from said user.

52. (new) A handheld control device as recited in claim 46 wherein said host processor is included in a video game console.

53. (new) A handheld control device as recited in claim 46 wherein said host processor is included in a personal computer.

54. (new) A handheld control device as recited in claim 46 wherein said host processor is included in a Web-access device.

55. (new) A handheld control device as recited in claim 46 further comprising a local processor separate from said host processor and operative to communicate with said host processor, to read said sensor, to control said actuator to produce tactile sensations, and to control said local display screen.

56. (new) A handheld control device as recited in claim 46 wherein said tactile sensations are coordinated so as to assist the user in navigating a menu displayed by said host processor.

57. (new) A handheld control device as recited in claim 57 wherein said tactile sensations include bump sensations which are output when the cursor is moved from one element in said menu to another element in said menu.